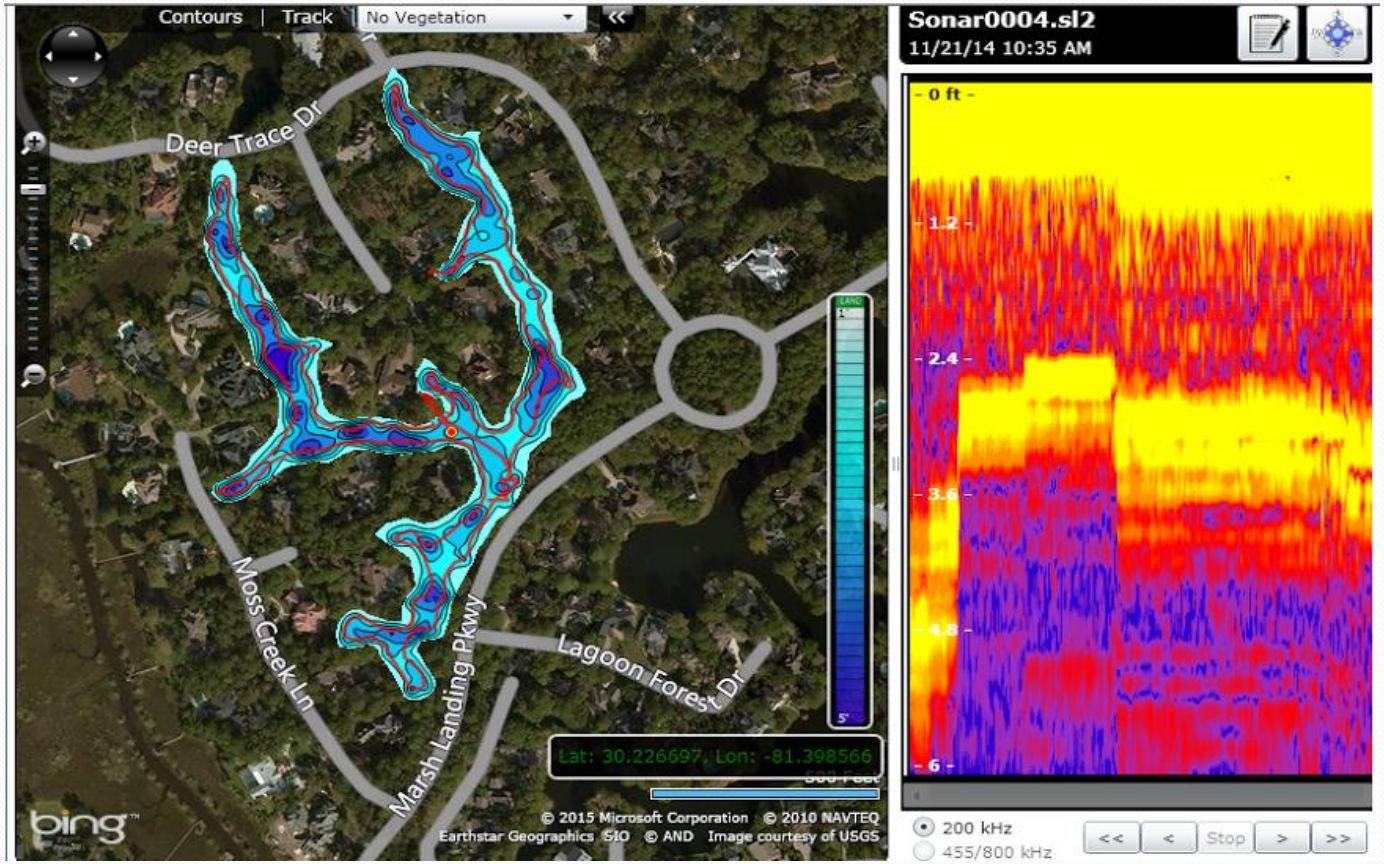
BATHYMETRY & DREDGE PRESENTATION

By: John Crabb

Dredging

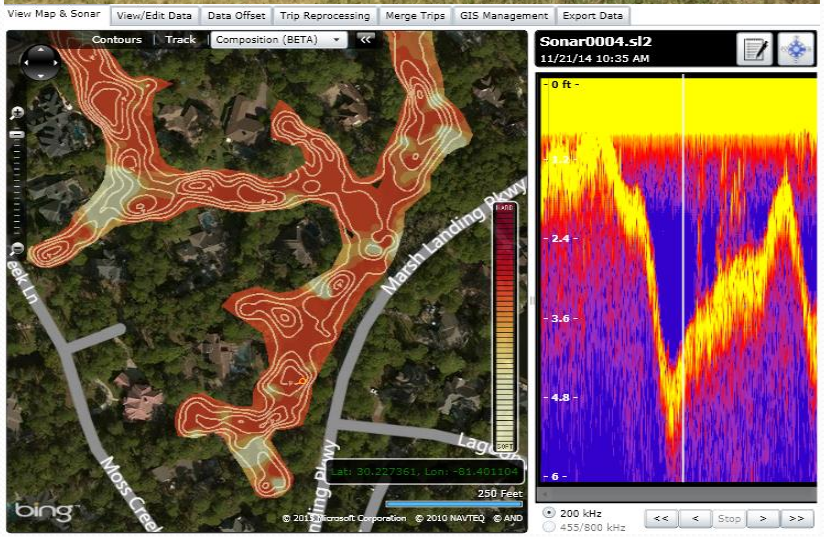
- Semap Area
- Bathymetry Map
- Analytics of data for sediment, volume, & placement
- Identify Spoil Disposal
- Permits
- Dredge Cost
- 50% deposit, contract, and schedule leads, usually 4-6 weeks
- Project duration for 5000 cy is about 1 week
- Dredge

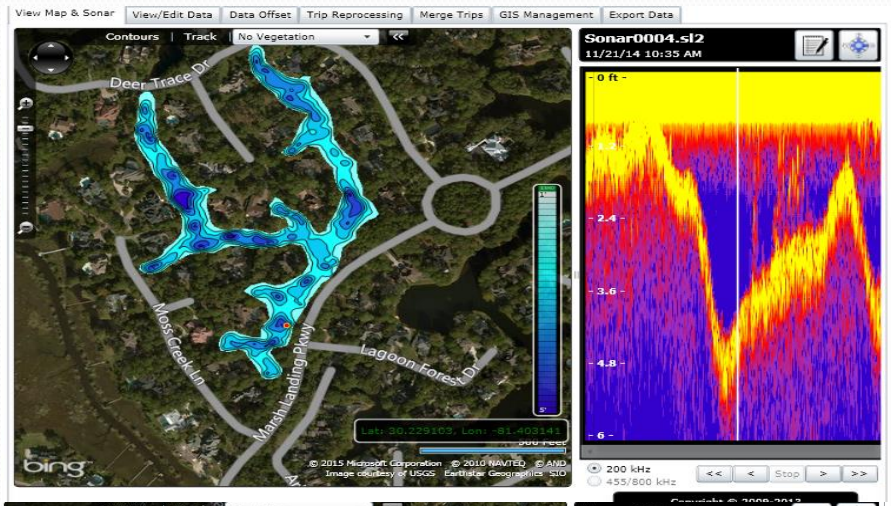
SeMaps

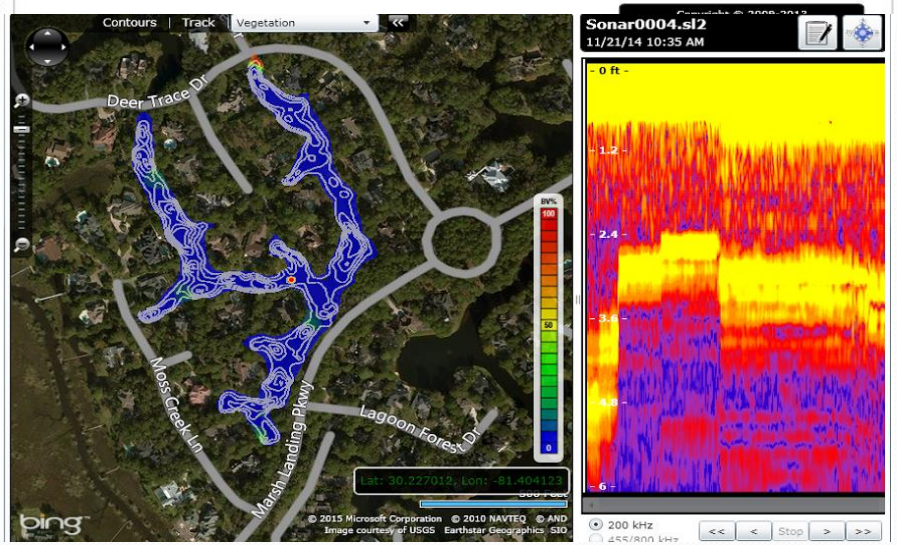


Identify dredge area with measurements

Bathymetry Mapping







Analytics of Data

- Identify sediment location
- Identify sediment volume per hardpan location
- Estimate of sediment to be dredged and approximate spoil volume example…..
  - 5400cy pre dredge = 810cy dredge spoil

Spoil Disposal

- Dewatering bags are most common for spoil capture
- Least expensive option with erosion benefits
- Example of bags planted with Spartina
- Example of off-site discharge that is then graded once dry
- Bag sizes are custom made per project

Permits

- Generally not required with hydraulic dredge process
- Critical area dredge permit if salinity of certain volumes present
- Critical Permit requires engineered plan. Our software program will support if Plan required
- Local governments are very supportive of our hydraulic process due to foot print and limited disturbance
- MH4 compliant process for NPDEA storm water permit

Dredge Cost

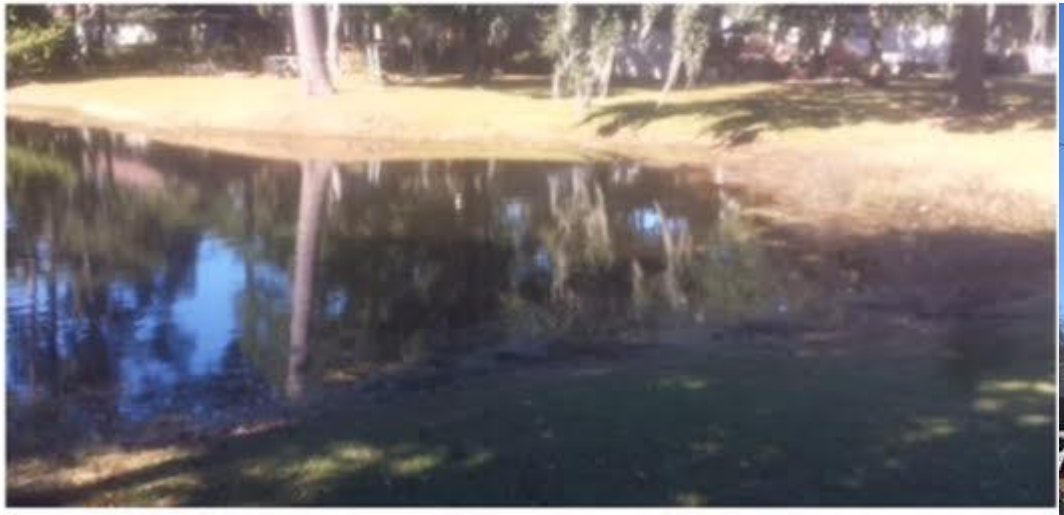
- Based on cubic yard volume removed
- Disposal option
- Generally priced per Cubic yard
- Exploration of alternate methods i.e……excavate

Project Duration

- Under normal condition we complete about 5,000-6,500cy per week
- Hours of operation are sun up to sun down
- 1 day for set up and 1 day for break down
- Foot print of operation is minimal
- Transport equipment and dredge are left on site each day

Dredge

Dredge Continued



Questions